main

```c
#include "device_config.h"


// Directives section
#define _XTAL_FREQ 1000000
#define ONE_SECOND 1000


// Data Type section


enum port_dir {output, input}; // output = 0, input = 1
enum port_ACDC {digital, analog};// digital = 0, analog = 1
enum resistor_state {set_ON, res_ON};// set_ON = 0, res_ON =
1
enum led_state {led_OFF, led_ON};// led_OFF = 0, led_ON = 1
enum button_state {pushed, no_pushed};// pushed = 0,
no_pushed = 1



// ISR for high-priority
void __interrupt (high_priority ) high_isr ( void );


//ISR for low-priority
void __interrupt (low_priority) low_isr (void);


//Functions declaration
void portsInit( void );  // Ports configuration


// Main Section
void main(void){
// Configuration
portsInit();


//Infinite Cycle
```

```c
while(1){
    // If button is pushed then:
    // Turn on the RA4 LED, otherwise turn off RA4 LED
    if(PORTBbits.RB4 == pushed) {
        LATAbits.LATA7 = led_OFF;
    } else {
        LATAbits.LATA7 = led_ON;
    }

    LATAbits.LATA7 = led_ON;
    __delay_ms(ONE_SECOND);     // Delay function XC8 Compiler
    LATAbits.LATA7 = led_OFF;
    __delay_ms(ONE_SECOND);
}
}

// Functions Section

//Ports configuration.
void portsInit(void){
    // Set PORTA as digital port also set RA4 and RA7 as output
    ANSELA = digital;
    TRISAbits.TRISA4 = output;
    TRISAbits.TRISA7 = output;

    // Set PORTB as digital port also set RA4 as input
    ANSELB = digital;
    TRISBbits.TRISB4 = input;

}
```